

**IN THE CLAIMS:**

Please amend the claims as follows:

---

1 --1. (Twice Amended) A non-invasive electro-optical sensor for removable adhesive attachment  
2 to a fingertip of a patient for use in measuring light extinction during transillumination of the blood-  
3 profused tissue within said fingertip, said sensor comprising:

4 an opaque, semi-cylindrical, substantially rigid cradle member having an electrical conductor  
5 channel formed therein, a concave surface, a convex surface and a diameter larger than the diameter  
6 of a human fingertip;

7 a flexible, initially substantially planar web-like support structure attached at one end thereof  
8 to said cradle member;

9 a photosensor mounted on said concave surface of said cradle member;

10 a light source mounted in said web of said support structure, said light source having a light-  
11 emitting surface which directly overlies said photosensor when said support structure is wrapped  
12 around a human fingertip within said cradle member; and

13 an adhesive layer on said concave surface of said cradle member and/or on a surface of the  
14 web-like support structure for removably adhesively securing said concave surface of said cradle  
15 member to a fleshy portion of a human fingertip such that said concave surface is held in  
16 conformance with said human fingertip without stressing said human fingertip.--

---

1 2. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 further including  
2 means for securing said support structure in a wrapped position around a human fingertip within said  
3 cradle member such that said light source directly overlies said photosensor.

4 3. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said opaque,  
5 semi-cylindrical, substantially rigid cradle member is constructed of molded polyolefin plastic.

1 4. (Unchanged) The non-invasive electro-optical sensor according to Claim 3 wherein said opaque,  
2 semi-cylindrical, substantially rigid cradle member is constructed of polypropylene.

1 5. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 further including a  
2 recess within said concave surface of said cradle member for receiving said photosensor.

/

**Please cancel Claim 6.**

1 7. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said support  
2 structure is attached at one end thereof to a circumferential portion of said opaque, semi-cylindrical,  
3 substantially cradle member such that said support structure can be wrapped around a circumference  
4 of said cradle member.

1 8. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said support  
2 structure is attached at one end thereof to an end portion of said opaque, semi-cylindrical,  
3 substantially cradle member such that said support structure can be wrapped around an axis of said  
4 cradle member.

1 9. (Unchanged) The non-invasive electro-optical sensor according to Claim 1 wherein said adhesive  
2 layer comprises a separate double-sided adhesive layer applied to said concave surface of said cradle  
3 member.

---

1 --10. (Twice Amended) A non-invasive electro-optical sensor for removable adhesive attachment  
2 to a fingertip of a patient for use in measuring light extinction during transillumination of the blood-  
3 profused tissue within said fingertip, said sensor comprising:

4 an opaque, semi-cylindrical, substantially rigid cradle member having an electrical conductor  
5 channel formed therein, a concave surface, a convex surface and a diameter larger than the diameter  
6 of a human fingertip;

C 7 a flexible, initially substantially planar web-like support structure attached at one end thereof  
8 to said cradle member;

9 a light source mounted on said concave surface of said cradle member;

10 a photosensor mounted in said web of said support structure, said photosensor having a  
11 photo-sensitive surface which directly overlies said light source when said support structure is  
12 wrapped around a human fingertip within said cradle member; and

13 an adhesive layer on said concave surface of said cradle member and/or on a surface of the  
14 web-like support structure for removably adhesively securing said concave surface of said cradle  
15 member to a fleshy portion of a human fingertip such that said concave surface is held in  
16 conformance with said human fingertip without stressing said human fingertip.--

---

1 11. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 further including  
2 means for securing said support structure in a wrapped position around a human fingertip within said  
3 cradle member such that said light source directly overlies said photosensor.

1 12. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2 opaque, semi-cylindrical, substantially rigid cradle member is constructed of molded polyolefin  
3 plastic.

1 13. (Unchanged) The non-invasive electro-optical sensor according to Claim 12 wherein said  
2 opaque, semi-cylindrical, substantially rigid cradle member is constructed of polypropylene.

1 14. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 further including  
2 a recess within said concave surface of said cradle member for receiving said light source.

**Please cancel Claim 15.**

1 16. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2 support structure is attached at one end thereof to a circumferential portion of said opaque, semi-  
3 cylindrical, substantially cradle member such that said support structure can be wrapped around a  
4 circumference of said cradle member.

1 17. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2 support structure is attached at one end thereof to an end portion of said opaque, semi-cylindrical,  
3 substantially cradle member such that said support structure can be wrapped around an axis of said  
4 cradle member.

1 18. (Unchanged) The non-invasive electro-optical sensor according to Claim 10 wherein said  
2 adhesive layer comprises a separate double-sided adhesive layer applied to said concave surface of  
3 said cradle member.